

REMARKS

The specification has been reviewed, and a clerical error of the specification has been amended.

In paragraph 1 of the Action, claim 6 was objected to because of the informalities. In view of the objection, claim 6 has been amended to correct the informalities.

In paragraph 2 of the Action, claims 1-6 were rejected under 35 U.S.C. 102(b) as being anticipated by Wada et al. (U.S. Patent No. 5,803,951). In paragraph 3 of the Action, claims 7 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et al. (U.S. Patent No. 5,803,951). In view of the rejections, claim 1 has been amended to include limitations of claims 2 and 3, and claims 2, 3 and 8 have been canceled. Claim 4 has been amended to correct dependency. New claim 9 has been added.

As recited in claim 1, a method of analyzing a sample comprises the steps of maintaining an internal pressure of a sample chamber at a predetermined level through a control valve; injecting the sample into the sample chamber; detecting an increment in the internal pressure upon injecting the sample into the sample chamber; comparing the increment with a predetermined threshold; holding the control valve at an opening degree before the sample is injected into the sample chamber for a predetermined period of time when the increment exceeds the predetermined threshold so that a substantial amount of the sample injected to the sample chamber can be sent to a detector without being lost through the control valve; and maintaining the internal pressure at the predetermined level again after the predetermined period of time.

In particular, in the invention, when the sample is injected into the sample chamber, an increment in the internal pressure of the sample chamber is detected, and compared with the predetermined threshold. When the increment exceeds the threshold, the control valve is held at an opening degree just before the sample is injected for the predetermined period of time. Accordingly, it is possible to send a substantial amount of the sample to the detector without losing the sample.

Wada et al. is directed to a gas chromatograph and a method of operating the gas chromatograph. The gas chromatograph has a control unit 25 for normally keeping an internal pressure of a vaporization chamber (sample chamber) 14 at a specified target level. When a sample is injected to the vaporization chamber to cause a sudden rise in the pressure, the normal pressure control is temporarily stopped. The target value of the pressure control is reduced for an appropriate length of time after the temporary stopping of the pressure control.

In Wada et al., the normal pressure control is temporarily stopped immediately after the injection of the sample. That is, the pressure control is stopped whereby the flow rate of the discharge gas is varied on the basis of the detected pressure value and the resistance in the split flow route is fixed to its value immediately before this temporary stopping (column 2, lines 27-34).

In the invention, when the sample is injected into the sample chamber, an increment in the internal pressure of the sample chamber is detected. Then, the increment is compared with the predetermined threshold. When the increment exceeds the threshold, the control valve is held at an opening degree just before the sample is injected for the predetermined period of time. On the other hand, when the increment does not exceed the predetermined threshold, the control valve is not held at a specific opening degree. That is, the internal pressure of the sample chamber is maintained at a constant level by controlling the control valve, i.e. the normal pressure control. Accordingly, it is possible to control the internal pressure of the sample chamber more accurately.

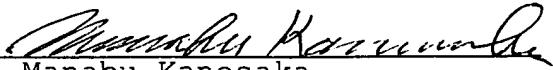
In Wada et al., the normal pressure control is temporarily stopped immediately after the injection of the sample. There is no disclosure or suggestion regarding the step of comparing the increment in the internal pressure with the predetermined threshold or holding the control valve only when the increment exceeds the predetermined threshold.

Therefore, Wada et al. does not disclose or suggest the features of the invention recited in claim 1.

Reconsideration and allowance are earnestly solicited.

Respectfully submitted,

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